

**Claims**

1. An apparatus for reading from and/or writing to at least a first and a second type of optical recording media,  
5 **including:**
- a) means for performing a focus search cycle for the first type of optical recording medium, the means being adapted to provide a focus error signal (FE) and a data  
10 signal (RF),
  - b) means for comparing the focus error signal (FE) and the data signal (RF) to respective thresholds and for emitting a signal indicative of the presence of an optical recording medium (S-CurveOK),
  - 15 c) means for detecting a focal zero crossing based on the focus error signal (FE), and
  - d) means for adapting settings to an operation mode for the second type of optical recording medium in case the data signal (RF) does not have a given relation to the  
20 respective threshold near the focal zero crossing.
2. The apparatus of claim 1, **wherein** the first type of optical recording medium to be distinguished is a high-reflectivity medium and the second type of optical  
25 recording medium is a low-reflectivity medium.
3. The apparatus of claim 2, **wherein** the switching to the second type of optical recording medium is performed before the completion of a focus search cycle.  
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4. The apparatus of claim 1, **further** including a first amplifier for a servo path signal and a second amplifier for a data path signal.
- 35 5. The apparatus of claim 2, **wherein** the indication that a low-reflectivity medium is loaded into the device causes the current search cycle with settings for a high-reflectivity medium to be abbreviated and to be continued with settings for a low-reflectivity medium.

6. A method for distinguishing between at least a first and a second type of optical recording media, **including:**

- a) performing a focus search cycle for the first type of optical recording medium, whereby a focus error signal (FE) and a data signal (RF) are provided,
- b) comparing the focus error signal (FE) and the data signal (RF) to respective thresholds and emitting a signal indicative of the presence of an optical recording medium (S-CurveOK),
- c) detecting a focal zero crossing based on the focus error signal (FE), and
- d) adapting settings to an operation mode for the second type of optical recording medium in case the data signal (RF) does not have a given relation to the respective threshold near the focal zero crossing.

7. The method of claim 6, **wherein** the first type of optical recording medium to be distinguished is a high-reflectivity medium and the second type of optical recording medium is a low-reflectivity medium.

8. The method of claim 6, **further** including the step of using an algorithm in order to distinguish between the types of optical recording media based on the signal relationship.

9. The method of claim 8, **wherein** the algorithm is designed to perform calculations resulting in distinguishing between the types of optical recording media in a single focus search cycle.